

NAME _____

Fill in the “Perceived Risk” portion of the table below. Assign a risk value to each action, and then decide whether the action was voluntary or involuntary. Do not fill in the “Actual Risk” and “Accept or Reject” portions of the table until your teacher presents the actual risks.

Perceived Risk			Actual Risk			Accept or Reject WHY?
Action	Risk rank 1 = most risk 15 = least risk	Voluntary Or Involuntary	Action	Risk rank 1 = most risk 15 = least risk	Voluntary Or Involuntary	
Being struck by a meteorite			Being struck by a meteorite			
Coal mining			Coal mining			
Chlorinated drinking water			Chlorinated drinking water			
Farming			Farming			
Firefighting			Firefighting			
Struck by lightning			Struck by lightning			
Hunting			Hunting			
Living with a cigarette smoker			Living with a cigarette smoker			
Motorcycling			Motorcycling			
Motor vehicle accidents			Motor vehicle accidents			
Playing high school football			Playing high school football			
Sky diving			Sky diving			
Smoking – all health effects			Smoking – all health effects			
Smoking – cancer only			Smoking – cancer only			
Swimming			Swimming			

Each student should share the action they perceived as having the most and the least risk.

Which activity did the majority of the students perceive as the most risky? Why?

How does the perceived risk of this activity compare with the actual risk?

Which activity did the majority of the students perceive as the least risky? Why?

How does the perceived risk of this activity compare with the actual risk?

Look at the results from the Actual risk portion of the table. In general, which risks are larger, those that are voluntary, or those that are involuntary?

Please discuss what is wrong with the argument in the following scenario from a risk assessment perspective: A concerned parent hops in the car with their child. There is an active thunderstorm outside with many flashes of lightning. As they are driving to school an argument ensues over the child's desire to play football. The parent states, "I do not want you to play football because it is too dangerous. There is too much risk involved and you could get hurt. My primary concern is for your safety. Football is not safe, so I don't want you playing. Besides, wouldn't your games interfere with our hunting trips and our country rides on the motorcycle?" The child replies, "Yeah, I guess it would. OK, if you don't think it's safe, I won't play." The child exits the car, unfurling an umbrella. "Put that away," exclaims the parent. "I don't want you to get hit by lightning!"

KEY

<u>Actual Risk</u>			
Action	Lifetime risk (# of harmful events per million participants)	Voluntary Or Involuntary	Rank Order 1 = most risk 15 = least risk
Being struck by a meteorite	0.00006	Involuntary	15
Coal mining	630	Voluntary	6
Drinking chlorinated drinking water	8	Involuntary	13
Farming	360	Voluntary	7
Firefighting	800	Voluntary	5
Struck by lightning	0.5	Involuntary	14
Hunting	30	Voluntary	10
Living with a cigarette smoker	10	Involuntary	11
Motorcycling	20,000	Voluntary	1
Motor vehicle accidents	240	Involuntary	8
Playing high school football	10	Voluntary	12
Sky diving	2,000	Voluntary	3
Smoking – all health effects	3,000	Voluntary	2
Smoking – cancer only	1,200	Voluntary	4
Swimming	32	Voluntary	9

Which activity did the majority of the students perceive as the most risky? Why?

Answers will vary.

How does the perceived risk of this activity compare with the actual risk?

Answers will vary.

Which activity did the majority of the students perceive as the least risky? Why?

Answers will vary.

How does the perceived risk of this activity compare with the actual risk?

Answers will vary.

Look at the results from the Actual risk portion of the table. In general, which risks are larger, those that are voluntary, or those that are involuntary?

Voluntary risks are by far more risky

Please discuss what is wrong with the argument in the following scenario from a risk assessment perspective: A concerned parent hops in the car with their child. There is an active thunderstorm outside with many flashes of lightning. As they are driving to school an argument ensues over the child's desire to play football. The parent states, "I do not want you to play football because it is too dangerous. There is too much risk involved and you could get hurt. My primary concern is for your safety. Football is not safe, so I don't want you playing. Besides, wouldn't your games interfere with our hunting trips and our country rides on the motorcycle?" The child replies, "Yeah, I guess it would. OK, if you don't think it's safe, I won't play." The child exits the car, unfurling an umbrella. "Put that away," exclaims the parent. "I don't want you to get hit by lightning!"

Driving is more risky than playing football

Hunting is more risky than playing football

Motorcycle riding is more risky than playing football

The child's chance of being struck by lightning is minuscule compared to the risks incurred by riding in a motor vehicle, riding on a motorcycle, or hunting.